

IN THE SPECIFICATION:

Please amend paragraph [0026] as follows:

[0026] An important advantage of using mHag-specific CTLs in adoptive immuno therapy of for example leukemia lies in their restricted and specific target cell damage. We take advantage of three of the known characteristics of human mHag i.e. 1) MHC-restricted recognition by T cells; 2) variable phenotype frequencies, i.e. --mHag polymorphism; and 3) restricted tissue distribution, allowing specific and distinct targeting of mHag HA-1 related therapy. Restrictive HA-1 tissue expression significantly increases the success of adoptive immuno therapy towards various types of cancer, such as small cell lung carcinoma cells which express also the HA-1 antigen. Moreover, since mHag are clearly expressed on circulating leukemic cells and clonogenic leukemic precursor cells of both myeloid and lymphoid origin, both types of leukemias can be targeted. mHag peptide CTLs can be generated ex vivo from mHag-negative BM donors for mHag-positive patients. Peptide-specific CTL clones from an HLA-A1-positive mHag-negative healthy blood donor are generated by pulsing autologous APCs with mHag HA-1 related synthetic peptide. Proliferating clones are expanded and tested for specific cytotoxic activity. Upon transfusion (either pre-BMT as part of the conditioning regimen or post-BMT as adjuvant therapy), the mHag peptide-specific CTLs will eliminate the mHag-positive patient's leukemic cells and, if of the patient's origin, also the patient's hematopoietic cells but will spare the patient's non-hematopoietic cells. If necessary, subsequent mHag-negative donor BMT will restore the patient's hematopoietic system. A universal approach is to generate "prefab" mHag peptide-specific CTLs by using mHag-negative healthy blood donors with frequent HLA-homozygous haplotypes. Patients who are mHag-positive (and their BM donors mHag-negative) and who match the HLA typing of the CTL donor can be treated with these "ready to be used" allo-peptide specific CTLs. Transduction of these CTLs with a suicide gene allows elimination of the CTLs in case adverse effects occur. The cytotoxic T-cells may also be immortalized. For the sake of illustration a number of methods and applications is also given below in the experimental part.